

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims: Please amend the claims as follows:

We claim:

Claim 1. (Withdrawn) A DNA molecule corresponding to a nucleotide sequence of a cereal pollen major allergen selected from one of the sequences in accordance with SEQ ID NO 1, 3, 5, 7, and 9.

Claim 2. (Withdrawn) A DNA molecule which hybridises with a DNA molecule according to claim 1 under stringent conditions and originates from DNA sequences from *Poaceae* species.

Claim 3. (Withdrawn) A DNA molecule, encoding a polypeptide, which cross-reacts immunologically with the major allergens Sec c 4, Hor v 4 or Tri a 4 from *Secale cereale*, *Hordeum vulgare* or *Triticum aestivum* and originates from DNA sequences from *Poaceae* species.

Claim 4. (Withdrawn) A DNA molecule, corresponding to a partial sequence or a combination of partial sequences according to claim 1, which encodes an immunomodulatory, T-cell-reactive fragment of a group 4 allergen from the *Poaceae*.

Claim 5. (Withdrawn) A DNA molecule, corresponding to a nucleotide sequence according to claim 1, encoding an immunomodulatory T-cell-reactive fragment, characterised in that said nucleotide sequence has been specifically modified by specific mutation of individual codons, elimination or addition.

Claim 6. (Withdrawn) A DNA molecule according to claim 5, characterised in that the said mutation results in the replacement of one, a plurality of or all cysteines of the corresponding polypeptide with another amino acid.

Claim 7. (Withdrawn) A recombinant DNA expression vector or a cloning system comprising a DNA molecule according to claim 1, functionally linked to an expression control sequence.

Claim 8. (Withdrawn) A host organism transformed with a DNA molecule according to claim.

Claim 9. (Withdrawn, Currently Amended) A process for the preparation of a polypeptide according to claim 24 ~~[[40]]~~, comprising

culturing a host organism transformed with the polynucleotide which encodes said polypeptide of (a)–(j): ~~the DNA molecule having the sequence set forth in SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, or SEQ ID NO: 9; and-~~
isolating the polypeptide from the culture.

Claim 10. (Currently Amended) A polypeptide according to claim 24 which is

- (a) a polypeptide which comprises the sequence set forth in SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8, or SEQ ID NO: 10; or
- (b) a polypeptide which is encoded by ~~a DNA~~ the polynucleotide whose sequence set forth in SEQ ID NO: 1, SEQ ID NO: 3, SEQ ID NO: 5, SEQ ID NO: 7, or SEQ ID NO: 9.

Claim 11. (Cancelled)

Claim 12. (Currently Amended) A medicament comprising at least one polypeptide according to Claim 24 ~~[[40]]~~ and a carrier.

Claim 13. (Currently Amended) A pharmaceutical composition comprising at least one polypeptide according to claim 24 ~~[[40]]~~ and an active ingredient or an adjuvant.

Claim 14. (Withdrawn, Currently Amended) A method for the prevention, diagnosis and/or treatment of an allergy triggered by group 4 allergens from *Poaceae*, comprising administering to a subject in need thereof at least one polypeptide according to claim 24 ~~[[40]]~~.

Claim 15. (Withdrawn) A DNA molecule according to claim 1 as medicament.

Claim 16. (Withdrawn) A recombinant expression vector according to Claim 7 as medicament.

Claim 17. (Withdrawn) A pharmaceutical composition comprising at least one DNA molecule according to Claim 15 and optionally further active ingredients and/or adjuvants for the immunotherapeutic DNA vaccination of patients with allergies in the triggering of which group 4 allergens from the *Poaceae* are involved and/or for the prevention of such allergies.

Claim 18. (Cancelled)

Claim 19. (Cancelled)

Claim 20. (Cancelled)

Claim 21. (Currently Amended) The polypeptide according to claim 24 ~~[[40]]~~, which is a recombinant polypeptide.

Claim 22. (Currently Amended) The polypeptide according to claim 24 ~~[[40]]~~, which is an isolated polypeptide.

Claim 23. (Withdrawn) A variant polypeptide, wherein at least one cysteine residue of a polypeptide sequence of SEQ ID NO: 2, SEQ ID NO: 4, SEQ ID NO: 6, SEQ ID NO: 8 or SEQ ID NO: 10 has been replaced with another amino acid by site-specific mutagenesis.

Claim 24. (New) A polypeptide which is

- (a) a polypeptide which is encoded by the polynucleotide comprising the sequence set forth in SEQ ID NO: 1 or a polypeptide which comprises the sequence set forth in SEQ ID NO: 2;
- (b) a polypeptide comprising amino acids 23 to 518 of SEQ ID NO: 2;
- (c) a polypeptide which is encoded by the polynucleotide comprising the sequence set forth in SEQ ID NO: 3 or a polypeptide which comprises the sequence set forth in SEQ ID NO: 4;
- (d) a polypeptide comprising amino acids 23 to 520 of SEQ ID NO: 4;
- (e) a polypeptide which is encoded by the polynucleotide comprising the sequence set forth in SEQ ID NO: 5 or a polypeptide which comprises the sequence set forth in SEQ ID NO: 6;
- (f) a polypeptide comprising amino acids 23 to 518 of SEQ ID NO: 6;
- (g) a polypeptide which is encoded by the polynucleotide comprising the sequence set forth in

- SEQ ID NO: 7 or a polypeptide which comprises the sequence set forth in SEQ ID NO: 8;
- (h) a polypeptide comprising amino acids 23 to 518 of SEQ ID NO: 8;
 - (i) a polypeptide which is encoded by the polynucleotide comprising the sequence set forth in SEQ ID NO: 9 or a polypeptide which comprises the sequence set forth in SEQ ID NO: 10; or
 - (j) a polypeptide comprising amino acids 23 to 518 of SEQ ID NO: 10;